

July 10, 1998

MEMORANDUM

SUBJECT: Delegation of 40 CFR Part 63 General Provisions Authorities to State and Local Air Pollution Control Agencies

FROM: John S. Seitz, Director /s/ John Seitz
Office of Air Quality Planning and Standards (MD-10)

TO: See Addressees

This memorandum is to provide guidance to the EPA Regional Offices on delegation of discretionary authorities relating to air toxics in 40 CFR part 63, subpart A (the General Provisions) to State and Local Air Pollution Control (S/L) agencies through 40 CFR part 63, subpart E (Approval of State Programs). Under the General Provisions, the EPA Administrator has the authority to approve certain changes to, or make decisions under, specific General Provisions requirements. Questions have been raised by the Regions about whether S/L agencies may make the same discretionary decisions when they are delegated the General Provisions.

In explaining the straight delegation process for delegating air toxics provisions to S/L agencies under 40 CFR part 63, subpart E, we did not clarify what discretionary authorities are delegated to S/L agencies when they seek straight delegation of the General Provisions. Although this is briefly discussed in the proposed General Provisions' preamble (Federal Register, August 11, 1993, page 42775-42777), the forthcoming proposed subpart E revisions will fill that gap by clarifying which discretionary authorities may be delegated to S/L agencies through straight delegation of the General Provisions. At your discretion, the Regional Offices must then specify in delegation agreements or documents which of the subpart A authorities are being delegated to each State. We recommend that you begin implementing these changes as soon as possible. Therefore, this memorandum is intended to explain the changes and provide guidance for you to begin implementing the changes now. Neither this memorandum nor the subpart E rulemaking changes any source-specific decisions that have already been made under the General Provisions, but the guidance in this memorandum should be used as guidance for all future decisions regarding the General Provisions' authorities.

To implement these changes, you will need to clarify with your S/L agencies which General Provisions' authorities have and have not been delegated. In cases where you may have delegated authorities in the past that should no longer be delegated, you will need to inform your S/L agencies that delegation of these authorities will be revoked.

At this time, we are also providing clarification of section 63.6(i)(1), "Extension of Compliance with Emission Standards," General Provisions authority. This section states "(u)ntil an extension of compliance has been granted by the Administrator (or a State with an approved permit program) under this paragraph, the owner or operator of an affected source subject to the requirements of this section shall comply with all applicable requirements of this part." It is our interpretation that this authority does not require delegation through subpart E and, instead, is automatically granted to States as part of their part 70 operating permits program approval regardless of whether the operating permits program approval is interim or final. Additionally, it is our interpretation that the State would not need to have been delegated a particular source category or have issued a part 70 operating permit for a particular source to grant that source a compliance extension.

We are also providing clarification of section 63.5(e) and (f), "Approval and Disapproval of Construction and Reconstruction," General Provisions authority. The Clean Air Act as

amended (1990 Amendments), sections 112(i)(1) and (3) state that the "Administrator (or a State with a permit program approved under title V)" can determine whether a source will comply with the standard if constructed properly. It is our interpretation that this authority does not require delegation through subpart E and, instead, is automatically granted to States as part of their part 70 operating permits program approval.

Link to section 112(l): This guidance only addresses the case where the General Provisions are delegated to an S/L agency through straight delegation under section 112(l) provisions which were promulgated in 40 CFR part 63, subpart E. Therefore, the guidance addresses S/L agencies' authority to make source-specific decisions only, not source-category wide decisions. Any S/L agency wishing to make discretionary decisions on a source-category wide basis under the General Provisions or any other part 63 requirement would need to use the section 112(l) delegation process under 40 CFR part 63, subsections 63.92, 63.93, or 63.94 to substitute its own rule or program. When subpart E revisions are promulgated, section 63.97 will be added to the above list as a delegation option.

Consistency with Previous Policies: This guidance is intended to be consistent with previous policies developed for new source performance standards (NSPS) under 40 CFR part 60, national emission standards for hazardous air pollutants (NESHAP) under 40 CFR part 61, and for changes to State implementation plans (SIP's). Past guidance issued for NSPS changes has permitted delegation to S/L agencies of all the Administrator's authorities except those that require Federal rulemaking, or those for which Federal oversight is critical to ensuring national consistency in the application of standards. Additionally, such delegations were not intended to give S/L agencies the authority to issue interpretations of Federal law that are subsequently binding on the Federal Government. Current SIP policy, as reflected in White Paper Number 2 for Improved Implementation of the Part 70 Operating Permits Program, permits S/L agencies to alter SIP requirements so long as the alternative requirements are shown to be equally stringent and are within a pre-approved protocol (and so long as public review is provided and EPA approval is obtained). The S/L agencies can show equivalent stringency by providing substantive criteria in SIPs governing the implementation of alternative requirements.

We recognize that Regions have the prerogative to approve delegation of specific authorities to some S/L agencies and not to others. Therefore, we encourage Regions to provide as clearly as possible an explanation of the criteria they have used to approve or disapprove delegation of a specific authority, and to apply those criteria consistently across their S/L agencies. Such criteria could include a determination of whether the S/L agency has sufficient expertise to make such decisions, or a determination that the working relationship between the Region and the S/L agencies is such that individual decisions could or could not be determined through consultation on an "as needed" basis. For example, you may want to work more closely with your S/L agencies on their first decision-making for some authorities, thus gaining assurance that the S/L agencies can and will make appropriate decisions. We also recommend that Regions obtain copies of all S/L agencies' alternative determinations for their records; especially where new issues are addressed.

Delegation of Specific Authorities

The part 63 General Provisions lists 15 specific types of authorities for which the Administrator may make discretionary decisions on a source-specific basis. When the General Provisions are delegated to an S/L agency, such discretion may be appropriately delegated, provided the stringency of the underlying standard would not be compromised.

We recognize that, in order for Regional Offices to have the authority to delegate some of the authorities outlined in this memorandum (such as intermediate changes to test methods), delegation 7-121 must first be revised to delegate these authorities to the Regions. We intend to make this revision, i.e., to delegation 7-121, as soon as possible. Additionally, the Emission Measurement Center of the Emissions Monitoring and Analysis Division must receive copies of any approved intermediate changes to test methods or monitoring. Please note that intermediate

changes to test methods must be demonstrated as equivalent through the procedures set out in EPA method 301 (see Attachment 1). This information will be used to compile a database of decisions that will be accessible to the S/L agencies and Regions for reference in making future decisions. Regions are asked to ensure that initial intermediate changes to testing and monitoring made in each Region are evaluated. All intermediate test changes and State-issued intermediate changes to monitoring should be provided via mail or facsimile to:

Chief, Source Characterization Group A
U.S. EPA (MD-19)
Research Triangle Park, NC 27711
Facsimile Telephone Number: (919) 541-1039

Changes in monitoring issued by Regional Offices should continue to be posted on the Applicability Determination Index (ADI). For electronic file transfer procedures for ADI updates, please contact Belinda Breidenbach in the Office of Compliance at 202-564-7022.

We have divided the General Provisions discretionary authorities into two categories, based upon the relative significance of each discretionary type of decision: they are those authorities which can be delegated and those authorities which cannot be delegated. These categories are delineated below:

Category I. General Provisions That May Be Delegated

In general, we believe that, where possible, authority to make decisions which are not likely to be nationally significant or to alter the stringency of the underlying standard should be delegated to S/L agencies. While we understand the need for Federal oversight of S/L agency decision-making which will ensure that the delegated authorities are being adequately implemented and enforced, we do not want to impede S/L agencies in running the part 70 operating permit and Federal air toxics programs with oversight that is cumbersome. We recommend that Regions rely on their existing mechanisms and resources for oversight. During oversight, if the Region determines that the S/L agency had made decisions that decreased the stringency of the standard, then corrective actions should be taken and the source(s) should be notified. Withdrawal of the program should be initiated if the corrective actions taken are insufficient.

The authorities listed in Table 1 may be delegated to S/L agencies, so long as the S/L agencies have the capability to carry out the Administrator's responsibilities and any decisions made do not decrease the stringency of the standards. Since you are ultimately responsible for all General Provisions authorities' decision-making made in your Region, I am comfortable with trusting your judgement about which of the Administrator's discretionary authorities listed here should be delegated to the S/L agencies in your Region. When the Region delegates any category I authority to the S/L agency, it could be accomplished either when the General Provisions are delegated or at the time that each relevant maximum achievable control technology (MACT) standard is delegated, with the exception of approval of construction and reconstruction (40 CFR part 63, section 63.5), which should be delegated when the General Provisions are delegated.

There are some category I authorities, such as approval of intermediate alternatives to test methods, for which you should be notified when decisions are made by your S/L agencies. Also, you may want to monitor the progress of S/L agencies' decision-making, in addition to updating your files for compliance and enforcement matters. We have indicated these authorities in Table 1 with an asterisk. We encourage you to document, in delegation agreements or delegation rulemaking, the request for notification when decisions are made regarding the indicated category I authorities.

Category II. General Provisions That May Not Be Delegated

Authorities listed in this section are those decisions which could result in a change to the stringency of the underlying standard, which are likely to be nationally significant, or which may

require a rulemaking and subsequent Federal Register notice. Therefore, these authorities must be retained by the EPA Regional Office or EPA Headquarters. As a result, the following authorities in Table 2 may not be delegated to S/L agencies (all references are to sections of 40 CFR part 63, subpart A):

If you have any questions, or would like to discuss this matter further, please contact me at (919) 541-5608, or Tom Driscoll of my staff at (919) 541-5135.

Table 1. General Provisions' Authorities that may be Delegate

Section
Authorities

Section 63.1
Applicability Determinations

Section 63.6(e)
Operation and Maintenance Requirements -
Responsibility for Determining Compliance

Section 63.6(f)
Compliance with Non-Opacity Standards -
Responsibility for Determining Compliance

Section 63.6(h)
Compliance with Opacity and Visible
Emissions Standards - Responsibility for
Determining Compliance

Sections 63.7(c)(2)(i) and (d)
Approval of Site-Specific Test Plans

Section 63.7(e)(2)(i)*
Approval of Minor Alternatives to Test
Methods (see Attachment 1)

Sections 63.7(e)(2)(ii) and (f)*
Approval of Intermediate Alternatives to Test
Methods (see Attachment 1)

Section 63.7(e)(2)(iii)
Approval of Shorter Sampling Times and
Volumes When Necessitated by Process
Variables or Other Factors

Sections 63.7(e)(2)(iv) and (h)(2), (3)
Waiver of Performance Testing

Sections 63.8(c)(1) and (e)(1)
Approval of Site-Specific Performance
Evaluation (monitoring) Test Plans

Section 63.8(f)*
Approval of Minor Alternatives to Monitoring
(see Attachment 1)

Section 63.8(f)*
Approval of Intermediate Alternatives to
Monitoring (see Attachment 1)

Sections 63.9 and 63.10
Approval of Adjustments to Time Periods for
Submitting Reports

Table 2. Authorities That May Not Be Delegated

Section
Authority

Section 63.6(g)
Approval of Alternative Non-Opacity
Emission Standards

Section 63.6(h)(9)
Approval of Alternative Opacity Standard

Sections 63.7(e)(2)(ii) and (f)
Approval of Major Alternatives to Test
Methods (see Attachment 1)

Section 63.8(f)
Approval of Major Alternatives to Monitoring
(see Attachment 1)

Section 63.10(f)
Waiver of Recordkeeping -- all

Addressees

Director, Office of Ecosystem Protection, Region I
Director, Division of Environmental Planning and Protection, Region II
Director, Air Protection Division, Region III
Director, Air, Pesticides and Toxics Management Division, Region IV
Director, Air and Radiation Division, Region V
Director, Multimedia Planning and Permitting Division, Region VI
Director, Air, RCRA and Toxics Division, Region VII
Assistant Regional Administrator, Office of Pollution Prevention,
State and Tribal Programs, Region VIII
Director, Air and Toxics Division, Region IX
Director, Office of Air Quality, Region X

Attachments

cc: B. Buckheit, 2242A
C. Garlow, 2111A
B. Hunt, MD-14B

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S. Mitoff, 2223A
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bcc: K. Blanchard, MD-12
F. Dimmick, MD-12
K. Kaufman, MD-12
J. Szykman, MD-13
Regional Air Toxics Coordinators

This letter has been concurred with William Lamason, SCGA, Emission Measurement Center, Charles Garlow, OECA, and verbally from Patrick Chang, OGC.

OAQPS:ITPID:IIG:TDriscoll:cjbaines:x1-5319:MD-12:June 17, 1998:
File: Driscoll/delauth9.mem

ATTACHMENT

Intermediate change to monitoring is a modification to federally required monitoring involving "proven technology" (generally accepted by the scientific community as equivalent or better) that is applied on a site-specific basis and that may have the potential to decrease the stringency of the compliance and enforcement measures for the relevant standard. Though site-specific, an intermediate decrease may set a national precedent for a source category and may ultimately result in a revision to the federally required monitoring. Examples of intermediate changes to monitoring include, but are not limited to: (1) use of a continuous emission monitoring system (CEMS) in lieu of a parameter monitoring approach; (2) changes to quality control requirements for parameter monitoring; and (3) use of an electronic data reduction system in lieu of manual data reduction.

Intermediate change to a test method is a within-method modification to a federally enforceable test method involving "proven technology" (generally accepted by the scientific community as equivalent or better) that is applied on a site-specific basis and that may have the potential to decrease the stringency of the associated emission limitation or standard. Intermediate changes are not approvable if they decrease the stringency of the standard. Though site-specific, an intermediate change may set a national precedent for a source category and may ultimately result in a revision to the federally enforceable test method. In order to be approved, an intermediate change must be validated according to EPA method 301 (part 63, appendix A) to demonstrate that it provides equal or improved accuracy and precision. Examples of intermediate changes to a test method include, but are not limited to: (1) modifications to a test method's sampling procedure including substitution of sampling equipment that has been demonstrated for a particular sample matrix and the use of a different impinger absorbing solution; (2) changes in sample recovery procedures and analytical techniques, such as changes to sample holding times and use of a different analytical finish with proven capability for the analyte of interest; and (3) "combining" a federally-required method with another proven method for application to processes emitting multiple pollutants. As an example, Region IX and the CARB have developed a testing protocol to determine whether California chromium electroplaters needed to "retest" for the Chromium Electroplating NESHAP. This testing protocol has been attached (Attachment 2) for your information should you choose to use it. Again, these examples should only be approved if they do not decrease the stringency of the monitoring requirement.

Major change to monitoring is a modification to federally required monitoring that uses unproven technology or procedures or is an entirely new method (sometimes necessary when the required monitoring is unsuitable). A major change to a test method may be site-specific or may apply to one or more source categories and will usually set a national precedent. Examples of major changes to a test method include, but are not limited to: (1) use of a new monitoring approach developed to apply to a control technology not contemplated in the applicable regulation; (2) use of a predictive emission monitoring system (PEMS) in place of a required continuous emission monitoring system (CEMS); (3) use of alternative calibration procedures tha

do not involve calibration gases or test cells; (4) use of an analytical technology that differs from that specified by a performance specification; and (5) use of alternative averaging times for reporting purposes.

Major change to a test method is a modification to a federally enforceable test method that uses unproven technology or procedures or is an entirely new method (sometimes necessary when the required test method is unsuitable). A major change to a test method may be site-specific or may apply to one or more source categories and will usually set a national precedent.

In order to be approved, a major change must be validated according to EPA method 301 (part 63, appendix A). Examples of major changes to a test method include, but are not limited to: (1) use of an unproven analytical finish; (2) use of a method developed to fill a test method gap; (3) use of a new test method developed to apply to a control technology not contemplated in the applicable regulation; and (4) "combining" two or more sampling/analytical methods (at least one unproven) into one for application to processes

Minor change to monitoring is a modification to federally required monitoring that (a) does not decrease the stringency of the compliance and enforcement measures for the relevant standard; (b) has no national significance (e.g., does not affect implementation of the applicable regulation for other affected sources, does not set a national precedent, and individually does not result in a revision to the monitoring requirements); and (c) is site-specific, made to reflect or accommodate the operational characteristics, physical constraints, or safety concerns of an affected source. Examples of minor changes to monitoring include, but are not limited to: (1) modifications to a sampling procedure, such as use of an improved sample conditioning system to reduce maintenance requirements; (2) increased monitoring frequency; and (3) modification of the environmental shelter to moderate temperature fluctuation and thus protect the analytical instrumentation.

Minor change to a test method is a modification to a federally enforceable test method that (a) does not decrease the stringency of the emission limitation or standard; (b) has no national significance (e.g., does not affect implementation of the applicable regulation for other affected sources, does not set a national precedent, and individually does not result in a revision to the test method); and (c) is site-specific, made to reflect or accommodate the operational characteristics, physical constraints, or safety concerns of an affected source. Examples of minor changes to a test procedure, such as a modified sampling traverse or location to avoid interference from an obstruction in the stack, increasing the sampling time or volume, use of additional impingers for a high moisture situation, accepting particulate emission results for a test run that was conducted with a lower than specified temperature, substitution of a material in the sampling train that has been demonstrated to be more inert for the sample matrix, and changes in recovery and analytical techniques such as a change in quality control/quality assurance requirements needed to adjust for analysis of a certain sample matrix. NOTE: The authority to approve decreases in sampling times and volumes when necessitated by process variables has typically been delegated in conjunction with the minor changes to test methods, but these types of changes are not included within the scope of minor changes.

ATTACHMENT

DESCRIPTION OF THE TECHNICAL REVIEW
PROTOCOL FOR PERFORMANCE TESTS OF

CALIFORNIA CHROME PLATING SOURCES

Introduction

In 1988, the CARB adopted a statewide airborne toxics control measure (ATCM) for the control of hexavalent chrome emissions from chrome platers (both decorative and hard) and chromic acid anodizers. In general, the California ATCM required facilities to install equipment or modify their operation to minimize emissions of hexavalent chrome. In addition to installing equipment and making the necessary process changes, hard chrome platers were required to demonstrate compliance by performing a District -approved source test.

Since the State ATCM was adopted, the majority of hard chrome platers in California have complied with the requirements by installing and source testing their control equipment to demonstrate compliance with the California standards.

On January 25, 1995, the EPA promulgated a national regulation to control emissions of chromium from chrome platers and anodizers. This regulation is known as the NESHAP for hard and decorative chromium electroplating and chromium anodizing tanks. This regulation also requires facilities to demonstrate compliance by performing an approved emission source test.

Further, on January 30, 1997, the EPA promulgated certain revisions to the chrome NESHAP dealing with the monitoring, recordkeeping and reporting (MRR) requirements for hard chromium electroplaters and chromic acid anodizers in California. Specifically, EPA extended the MRR compliance deadline from January 25, 1997 to July 24, 1997. This action was taken to allow time for CARB to establish and get approved MRR requirements for these sources that would be at least as stringent as the Federal NESHAP requirements; however, that work remains unfinished. The Federal NESHAP requires these sources to monitor applicable parameters on and after the date on which the initial performance test is required to be completed, which is July 24, 1997. It is consistent with the revised NESHAP MRR requirements that all California source tests of hard chrome platers and chromic acid anodizers conducted prior to July 24, 1997 be reviewed according to the performance test review criteria contained herein to determine compliance with the applicable NESHAP emission standard. This recommendation is made notwithstanding the restrictions identified in 40 CFR 63 section 63.344(b)(2).

This criteria was developed by a team of chrome plating/regulatory professionals representing EPA, CARB, Bay Area Air Quality Management District, South Coast Air Quality Management District (SCAQMD), and Pacific Environmental Services (industry). The criteria are necessary in reviewing the existing chrome plating emissions source tests in California. It is estimated that in California there are approximately 100 hard chrome platers, 150 decorative chrome platers and 50 chromic acid anodizers, over half of which have performed source tests (where applicable). Many of these source tests have sufficient information and quality control to demonstrate compliance with the Federal NESHAP for chrome plating and anodizing. This document is to present and discuss the criteria developed for this purpose.

NESHAP Source Testing for Compliance

The NESHAP standard for chrome plating and anodizing indicates that source testing to demonstrate compliance with the standard is required unless the facility is a decorative chrome plater or chromic acid anodizer choosing the alternate emission limitation of 45 dyne/cm bath surface tension. In accordance with this, 40 CFR part 63 specifies acceptable source test procedures, methods, materials, etc. Although the requirements outlined in the NESHAP are specific, there are allowances for the "owner or operator of an affected source conduct[ing] performance testing at startup to obtain an operating permit in the State in which the affected source is located, the results of such testing may be used to demonstrate compliance with this subpart . . ." (40 CFR 63.344). The following discussion presents a step-by-step approach for determining whether an existing source test in California can be used to demonstrate compliance with the chrome plating and anodizing NESHAP.

Determining if Existing Source Tests Can Be Used to Demonstrate Compliance

The Chrome Plating Source Test Review Criteria Section (see below) provides a step-by-step process for the review of existing source tests in light of the NESHAP standards. The following is a discussion of each of the criteria steps from the Chrome Plating Source Test Review Criteria Section with an explanation of the rationale for the chosen process.

Criteria Step 1. Compliance with the NESHAP Standards Demonstrated? The NESHAP standards are in terms of milligram of total chrome per dry standard cubic meter (mg/dscm) of ventilation gas flow. The NESHAP standards are listed in 40 CFR part 63, section 63.342. Emission standards vary depending on whether the facility performs hard chrome plating, decorative chrome plating, chromic acid anodizing, or whether the facility is new or existing, and how large the facility is (how much chrome plating is performed on an annual basis).

Most of the existing chrome emission source test reports provide a variety of information including test date and time, plating bath rectifier amp-hours, sample volume, ventilation gas velocity, sample flowrate percent isokinetic, duct temperature, flowrate, ventilation gas water content, total and hexavalent chrome catch, as well as chrome emissions on a process rate (amp-hrs) and concentration basis.

- If the resulting average source test emission value is less than or equal to the applicable NESHAP standard, the source test acceptability determination can continue.

- If the existing source test does not demonstrate compliance with the NESHAP, then the facility operator must decide what course of action to take for a remediation. For example, the facility operator may need to make some operational or design changes to lower the emission rate to achieve compliance with the NESHAP standards. A retest will be required. All future source tests should be conducted according to the requirements and specifications of 40 CFR part 63.344 Performance test requirements and test methods.

Criteria Step 2. Was the Source Test Conducted Under Close Approximation of Normal Operating Conditions? Normal operating conditions are defined as normal bath temperatures (+ 10 deg F), normal bath composition range (within 5 percent), normal rectifier amperage range, normal agitation rates, and normal voltage loadings. For the purpose of demonstrating compliance, normal operating conditions can also include conditions needed to meet specific source test requirements such as the use of dummy parts to be plated.

Although there can be a significant variation in the operating conditions from one plating shop to another, most chrome platers are well aware of their individual normal operating conditions and operate on a consistent basis with these constraints. Significant variation from the normal operating mode is undesirable for quality assurance and controllability purposes.

Facilities may have increased the source test sampling period in order to capture the requisite sample mass for analytical detection. Extending the source test period may require the use of dummy parts rather than the real parts that would normally be plated. An example of this is a Bay Area plater which plates automobile body part dies. Plating such a part for a longer than normal period would result in a plated part with tolerances outside of specification limits. To avoid ruining an expensive automobile die, a dummy part (a large sheet of steel, sized similar to the die) is plated for the time period required to meet capture requirements.

- If the source test was conducted under close approximation of normal operating conditions, then the evaluator can proceed to the next step in the evaluation process, step 3.

- If the source test was conducted under conditions deemed abnormal, the facility must conduct a new source test. All retests should be conducted according to the requirements and specifications of 40 CFR part 63.344 Performance test requirements and test methods.

Criteria Step 3. Correct Use of Approved Test Method? Source tests to demonstrate compliance with the requirements of the NESHAP must use the EPA approved source test

method. According to 40 CFR part 63.344 the following source test methods have been deemed acceptable to demonstrate compliance with the NESHAP standards: EPA method 306 or 306A (conducted after December 1991) and CARB method 425. The EPA has granted a verbal approval for the use of the SCAQMD method 205.1 for total chrome analysis only and will issue an official letter soon.

Any use of an approved source test method must be done in strict accordance with the requirements and specifications of the method itself and performance testing requirements of section 63.344 of the NESHAP. Such requirements include sample point locations, use of EPA method 5 source test train, impinger solution compositions, isokinetic ratios, sample handling, sampling times, sample volume, catch mass requirements, etc. Implicit in the use of an approved source test method is the correct use of the method itself. Any variation in the source test procedure will trigger a retest unless the change has been approved beforehand by the EPA and the local permitting authority.

Criteria Step 4. Number of Runs: Paragraph 63.7(e)(3) of the part 63 General Provisions specifies at least three sampling runs to make up one source test. If three sampling runs were performed, the reviewer is directed to proceed on to review criteria step 5 (catch mass requirement).

<3 sampling runs: Previous source tests attempted to meet the requirement for at least three sampling runs. For some previous California source tests, the expected ultra-low concentrations of chrome in the exhaust required the use of longer than normal source test runs (normal sampling run length is 120 minutes and normal sampling volume is 1.7 dscm).

Some operators chose (with local agency approval) to perform longer sample runs to capture enough sample to produce a chrome emission number and to reduce the potential for error with minimal chrome capture. In California the longer times ranged from 3 to 8 hours per sampling run. Due to the added expense, potential problems of multiple long sampling runs, and the potential operational conflicts due to reduced production from multiple sampling runs, these facilities proposed performing one or two long duration source tests instead of three or more shorter runs.

For tests where less than three sampling runs were conducted, the reviewer is directed to go to criteria step 6 to determine if the source testing results are far enough below the NESHAP emission limit to warrant acceptance.

Regarding future source testing/Retesting: Unless prior approval is obtained from EP and the local air quality agency, future source tests will require at least three sampling runs to be acceptable.

Criteria Step 5. Catch Mass Requirements: Consistent with the discussion in section 2.2.2 of method 306 in 40 CFR part 63, appendix A, it is recommended that the catch mass requirement be at least five times the limit of detection for the analytical method chosen. Such catch mass requirements produce analytical results well within the range of confidence. If the catch mass requirements are not met, the reviewer is directed to criteria step 6.

Criteria Step 6. Source Test Emission Results Compared With NESHAP Limit: If the catch mass requirement is not met, the reviewer evaluates the resulting emission rate according to criteria step 6. Criteria step 6 requires that the source test results be $\leq 1/5$ of the respective NESHAP standard; if this specification is met, then the existing source test can be accepted for demonstrating compliance with the NESHAP. A factor of one fifth (20 percent) is consistent with the catch mass requirements.

Criteria step 6 directs that if the source test results were greater than $1/5$ of the NESHAP standard, the facility must retest. All retests should be conducted according to the requirements and specifications of 40 CFR part 63.344 Performance test requirements and test methods.

Regarding future source testing/Retesting: Unless prior approval is given from EPA and

the local air quality agency, all future source tests will require at least three sampling runs to be acceptable. The catch mass requirements identified in 40 CFR part 63, section 63.344 also must be met unless the source test emission result is <1/5 of the respective NESHAP emission limit or is below detection levels.

Other Issues: Establishing Monitoring Parameter Ranges to Ensure Ongoing Compliance

Continued compliance with the chrome plating and anodizing NESHAP is assured by monitoring of specific operating parameters associated with the control equipment. Normally operating parameter values or ranges are established in conducting the performance test. Since many California source tests were performed before the final adoption and understanding of the NESHAP monitoring requirements, some alternate procedures may be necessary to establish appropriate ranges/values for the monitoring parameters.

The Establishing Monitoring Parameters to Ensure Ongoing Compliance Section (see below) provides an approach to establishing the monitoring parameter compliance ranges after the performance test is completed. Where applicable, the basic requirements include the following:

- (1) Source test conducted during normal operating conditions.
- (2) Flowrate was monitored/recorded at outlet of emission control device.

Control Device Pressure Drop and Velocity Pressure: Assuming the above criteria items (1) and (2) were met and that the current ventilation gas flowrate is within 10 percent of the flowrate determined during the source test, the current control device pressure drop and/or velocity pressure can be used to establish the appropriate ranges/value for the monitoring parameters. Guidance for the development of the operating parameter range is found in 40 CFR 63 section 63.344.

Surface Tension Parameter Development: If the surface tension was monitored during the performance test, the facility operator should use the higher of either (1) the surface tension parameter measured during the source test; or (2) 45 dyne/cm as specified in the NESHAP. If the surface tension was not monitored during the source test, the facility should use 45 dyne/cm as the maximum allowable surface tension parameter for monitoring ongoing compliance.

Foam Thickness Parameter Development: If the foam additive thickness was monitored during the performance test, the facility operator should use the lessor of either (1) the foam thickness parameter measured during the source test; or (2) the 1 inch foam thickness as specified in the NESHAP. If the foam thickness was not monitored during the source test, then the facility should use 1 inch foam thickness as the minimum allowable thickness parameter for monitoring ongoing compliance.

Chrome Plating Source Test Review Criteria

The following criteria are to be used for those chrome plater and anodizer performance tests conducted in the State of California prior to July 24, 1997. If the source test cannot be evaluated using these criteria, then the facility owner/operator should contact Kingsley Adeduro, EPA Region IX at (415) 744-1177 for guidance.

- (1) Compliance with the NESHAP Standards Demonstrated?
Y: Go to (2)
N: Evaluate operation/make necessary changes then perform retest according to 40 CFR 63.344.
- (2) Was source test conducted under close approximation of normal operating conditions?
Y: Go to (3)

N: Retest according to 40 CFR part 63.344.

- (3) Correct Use of Approved Test Method [CARB 425, EPA 306, EPA 306A (conducted after 12/91), SCAQMD 205.1 (total chrome only)]

Y: Go to (4)

N: Retest according to 40 CFR part 63.344.

- (4) Number of Sampling Runs

(a) 3 or more runs: Go to (5)

(b) 1 or 2 runs: Go to (6)

- (5) Catch Mass Requirements (at least 5 times the limit of detection for the analytical method)

Hex Chrome Analysis Methods Diphenylcarbazide Colorimetric Test

Ion Chromatography with Post-Column Reactor (ICPCR)

Total Chrome Analysis Methods: Atomic Absorption Graphite Furnace (AAGF)

Inductively Coupled Argon Plasmography (ICAP)

Y: S/T is acceptable

N: Go to (6)

- (6) Source Test Emission Results <20 percent (1/5) of the NESHAP Emission Limit?

Y: S/T is acceptable

N: Retest according to 40 CFR part 63.344. Establishing Monitoring Parameters to Ensure Ongoing Compliance

- (A) Were normal operating conditions employed during source test performance?

Y: Go to (B)

N: Retest according to source testing and operating parameter development guidelines of 40 CFR part 63.344.

- (B) Were appropriate operating parameters monitored/recorded during the source test?

Y: Use measured parameter values to establish ranges for ongoing compliance monitoring.

N: (a) If bath emissions controlled by bath controls (surfactant additive or foam) only go to (E).

(b) If bath emissions controlled by bath controls and downstream control device go to (C) and (E).

(c) If bath emission controlled by downstream control device(s) go to (C).

- (C) Was control device outlet flow rate recorded during the source test?

Y: Go to (D).

N: Retest according to source testing and operating parameter range development guidelines of 40 CFR part 63.344.

- (D) Determine inlet velocity pressure compliant range as follows: (for PBS only)

Collect concurrent data on facility's inlet velocity pressure, and scrubber outlet flow rate.

If the current scrubber outlet flow rate is within 10 percent of the outlet flow rate measured during the source testing, then the current inlet velocity pressure value can be used to establish the compliant range for continuous monitoring.

Determine control device pressure drop complaint range as follows: (for CMP, FB Mist Eliminator, PBS, HEPA Filter)

Collect concurrent data on pressure drop across the control device, and outlet flow rate.

If the outlet flow rate is within 10 percent of the outlet flow rate recorded during the source testing, then the current pressure drop value can be used to establish the compliant range for continuous monitoring if the controls are visually inspected and the work practice standards are conducted immediately prior to collecting current pressure drop data.

(E) Surfactant Additive Surface Tension: If surface tension was monitored during the source test, use the higher of either (1) the surface tension developed during the source test or (2) 45 dyne/cm surface tension for demonstration of ongoing compliance. If no surface tension monitoring during source test, use 45 dyne/cm as surface tension parameter for demonstration of ongoing compliance.

Foam Thickness: If foam thickness was monitored during the source test, use the minimum thickness parameter for demonstration of ongoing compliance. If no foam thickness monitoring during source test, use 1 inch foam blanket as parameter for demonstration of ongoing compliance.